



Energy Future System Operator

Response form

The consultation is available at: <https://www.gov.uk/government/consultations/proposals-for-a-future-system-operator-role>

The closing date for responses is 28th September 2021

Please return completed forms to:

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AND

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Personal / Confidential information

Please be aware that we intend to publish a summary of all responses to this consultation.

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

Ofgem will publish non-confidential responses (or parts of response) on its website. If you want your response in whole or in part to be considered confidential, please tell us in your response and say why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Please be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

All responses will be processed by BEIS and Ofgem as this is a joint consultation.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

I want my response to be treated as confidential ☐

Comments: [Click here to enter text.](#)

About You

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	Respondent type
<input type="checkbox"/>	Business representative organisation/trade body
<input type="checkbox"/>	Central government
<input type="checkbox"/>	Charity or social enterprise
<input type="checkbox"/>	Individual
<input checked="" type="checkbox"/>	Large business (over 250 staff)
<input type="checkbox"/>	Legal representative
<input type="checkbox"/>	Local government
<input type="checkbox"/>	Medium business (50 to 250 staff)
<input type="checkbox"/>	Micro business (up to 9 staff)
<input type="checkbox"/>	Small business (10 to 49 staff)
<input type="checkbox"/>	Trade union or staff association
<input type="checkbox"/>	Other (please describe)

Questions

Chapter 2

Questions in this section relate to

- The case for change

Question 1

Do you agree that net zero will create the need for new technical roles in the electricity and gas systems, and require a new approach to for energy system governance?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

[Click here to enter text.](#)

Question 2

Do you agree that the establishment of a Future System Operator is needed to fulfil the kinds of technical roles needed to drive net zero?

A ☐ **Yes** ☒ **No**

B

If not please explain why:

We agree that the establishment of an independent Future System Operator is needed to drive net-zero. The move towards net-zero is likely to result in unprecedented challenges and drive profound changes in the energy system. An organisation like the envisaged FSO, highly technically equipped, would no doubt be central to those challenges and in driving the transition. However, we see the energy system being more and more integrated making its operations more complex. A single organisation may not always have all the

technical expertise required to make every decision and may need to consult technical experts within individual market participants. It is probably not practical or desirable that the FSO attempts to 'know everything'.

A holistic and coordinated approach towards decision making will be required. Hence, we believe that it is important that the FSO draws upon all the expertise that exists across the system.

Question 3

Do you agree that a Future System Operator should have roles in both the electricity and gas systems?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

[Click here to enter text.](#)

Question 4

Do you agree that a Future System Operator should be entirely separate from National Grid plc?

A ☒ **Yes** ☐ **No**

B

If not please explain why:

[Click here to enter text.](#)

Question 5

What issues are there with existing institutional arrangements in the UK energy system in relation to system-wide decision-making and planning?

Please provide your answer below:

We believe there is a need for independent and balanced approach towards decisions impacting the energy system and consumers. In most cases, and particularly as the system becomes ever more distributed and complex, decisions will not be simple binary ones.

As mentioned above, we believe that market participants have an important role to play in driving net-zero and drawing on the expertise across the system is important in this. A poor decision could result in many millions, or even billions of pounds being badly invested

However, we also know that addressing the climate emergency is urgent and hence decisions need to be made rapidly and then followed through on. Historically, decision-making in the sector has been slow and then delivering that change has, if anything, been slower. The roles of the key players in the sector including the regulators as well as system and network operators need to evolve to support the ever-changing energy system. In absence of an overarching approach and stifled competition and innovation, the market will not be able to deliver desired and efficient outcomes. The market, which is currently fragmented, needs to work together as we move towards net-zero. So, whatever institutional arrangements we land on need to promote timely and well-informed decision-making if we are to have any chance of achieving our net-zero targets.

Question 6

What examples/case studies are you aware of where net zero delivery in one part of the energy system did not adequately account for cross-system impacts or costs?

Please provide your answer below:

Renewable generation has been the key ingredient in the UK's move away from fossil fuels. Adding renewable generation, like wind, which is highly intermittent, comes with its own challenges and costs such as increase in complexity of grid operations, need for network expansion and reinforcement, need for long distance transmission, etc. While the potential for these issues was identified, there was still an apparent misalignment between the pace of construction of new renewable generation in the North of Scotland and the provision of additional transmission capacity such as Beaulieu-Denny and in addressing the known constraints at the English-Scottish border.

Similarly, under the capacity market, there have been instances where diesel generation was identified as the cheapest and reliable source for providing electricity generation without much considering the environmental impact.

Heat can be another potential example. Changing the ways in which buildings are heated – with electrification, hydrogen, hybrid heat pumps – are likely to have impacts across the entire energy systems.

Question 7

Where should government focus in our efforts to improve systems thinking and coordination across the energy system?

Please provide your answer below:

We appreciate government is focussing on improving systems thinking, strategic planning and coordination across the energy system. We also agree that regardless of where any future strategic function may sit (albeit, assumed to be Ofgem), working closely with the FSO drawing on their expertise to analyse and tackle systems issues will be required. We believe that government is right in focussing on the institutional and governance arrangements required to support the planning and coordination. Other decisions which are more related to implementation, such as technology choices, can probably be then left to organisations like the FSO or other sector experts (relying on their expertise) to take. But while designing the policy interventions, it is better if it is done with inputs from those who will potentially implement them. In sum, we think the Government should set out the overall picture and make sure the interventions are implemented while delegating the job to implement on other sector experts.

Chapter 3

Questions in this section relate to

- What existing, enhanced and new roles and functions we consider a Future System Operator is well placed to take on to drive the transition to net zero.

Question 8

Do you agree that the FSO should undertake all the existing roles and functions of NGESO?

A

☒ Yes

☐ No

B

If not please explain why:

[Click here to enter text.](#)

Question 9

Do you agree there is a case for the FSO to undertake the gas strategic functions outlined in Option 1?

A

☒ Yes

☐ No

B

If not please explain why:

[Click here to enter text.](#)

Question 10

Do you agree that there is not currently a case for the FSO to undertake all GSO roles and functions, including real time gas system operation, as outlined in Option 2?

A

☒ Yes

☐ No

B

If not please explain why:

[Click here to enter text.](#)

Questions in this section relate to

- 3.2 in the FSO Consultation

Question 11

Do you have views on the proposal for an advisory role? What organisations do you consider would benefit from the provision of advice by the FSO?

Please provide your answer below

We agree with the government's view that the decision making organisations would benefit from the advice of the FSO on the implications of different potential decisions on the system. These could include BEIS and other government departments, Ofgem, code manager (in future), Climate Change Committee, etc. We also believe that there may be some benefits that the DNOs could also derive from expert advice of FSO as they get on board their journey as system operators themselves. Similarly, there could be other industry players, innovators, etc. who could also benefit from FSO's advice.

Who should bear the costs of providing that advice?

If the FSO is providing advice to the government bodies as part of the governance structure, then logically customers should pay for that in their bills.

If the advice is to market participants, they should pay for it but based on a transparent, fair, and cost-reflective charging structure. However, this might also be eventually borne by the consumers only.

Question 12

Do you have any views on the other areas where we are considering new and enhanced roles and functions for the FSO (outlined in section 3.2)?

Please elaborate:

There is a potential for additional or enhanced roles for the FSO which may emerge as the sector decarbonises. However, we also agree that there is scope for further consultation before a decision is taken on who should undertake that role. The FSO should not be assumed as the default answer. While it may be best suited to undertake some of the new roles, there may be others who would merit more for some of the other roles.

Chapter 4

Questions in this section relate to

Organisation Design

- The high-level characteristics and detailed attributes which we consider are needed to achieve this, and seeks views on two different organisational models and the extent to which they meet these characteristics and attributes.

Question 13

What are your views on our proposed characteristics and attributes of a future system operator and how the models presented would deliver against them?

Please provide your answer below

We agree with the proposed characteristics including the need for the FSO to be technically expert, operationally excellent, accountable to customers, independently minded (without undue influence from industry or short-term influence from government), and resilient. We also agree with the listed attributes that will be required by the FSO to have. The FSO will have to carefully invest in the right technology and the right kind of skills. Further, appropriate governance structure will be required to not only drive the right behaviour and protect consumer interests but also to provide sufficient independence and incentives to operate efficiently.

Are there other characteristics or attribute that we have not yet considered?

The high level characteristics described in this section cover most of the desired elements that we would like to see in the FSO. Another characteristic that might be useful to have in the FSO is to be flexible and agile. With the ongoing change within the sector, the FSO will need to be flexible in their decision making approach and even willing to experiment to fully understand the implications or potential inherent within changes.

Question 14

Are we considering the right organisation models for the FSO? And why?

Please provide your answer below

We think the government is considering the right organisation models for the FSO. Being independent will be crucial to the successful operation of the FSO given the many different competing capabilities that it will need to co-ordinate and manage.

We would endorse a private sector ownership model for the FSO, as this has the potential for sharper incentives to be put in place than would be the case for a public sector body. Getting the right incentive structure in place is critical to ensure optimum performance from the FSO.

Question 15

Are we considering the right elements for the FSO's regulatory and accountability frameworks? And why?

Please provide your answer below

We believe the right elements for the FSO's regulatory frameworks are being considered with due focus on the interest of consumers and ultimate objective of achieving net-zero. We would just like to reiterate that the incentive structure will be very important in achieving the desired outcomes irrespective of the organisation model is chosen. The regulatory framework will need to ensure that the returns are reasonable and aligned to the risks that the FSO is taking

Question 16

Do you have views on the level of shareholding or control involving other 'energy interests' and the FSO at which a conflict of interest would become a concern?

Please provide your answer below

As also mentioned in our response to Question 14, we strongly believe that being independent will be crucial to the successful operation of the FSO. In carrying out its roles and functions, the FSO will need to engage with varied energy market participants including regulators, government bodies and other industry players. And in order to provide confidence to these industry players in the impartial and fair decision making capabilities of the FSO, it is important that the ownership and governance of the FSO is free from any other interests in the energy sector. As also rightly pointed out in the consultation document, it is not just the 'potential' conflict of interest, but also 'perceived' conflict of interest that can distort decision making and create inefficiencies.

Hence, we believe that the ownership of the FSO should be independent of any other interest in the energy sector.

Question 17

Are we considering the right implications of our proposals for Elexon and Xoserve?

Please provide your answer below

Elxon has been wholly owned by NGESO, however, it has been operationally and financially independent while being a not-for-profit organisation working solely in the interest of the consumers and being accountable to them. We agree with the view that this independence needs to be retained for it to continue to be accountable to the consumers. We understand this is being considered under the Energy Code Reform consultation and believe will bring out any other implications as well.

For Xoserve, which is jointly owned by the gas industry, we see the impact of creation of FSO to be minimum. However, we do believe that if the FSO needs to be independent of other interests in the energy industry, it will be useful to not have connections with these central delivery bodies. We understand that the government will be mindful of this when they define the roles of FSO. We will look forward to more information on this in future consultations.

Chapter 5

Questions in this section relate to

Implementation

- A preferred high-level approach for implementation of the FSO with the aim of seeking views on how the FSO can best implemented in practice

Question 18

What is your view on the preferred implementation approach?

Please explain why

We are happy with the preferred implementation approach where the starting point will be the transfer of functions already being performed by NGESO and NGG followed by introduction of other functions in a phased manner. The key planning consideration should be to ensure that no instability is introduced through actions associated with establishment of the FSO.

Question 19

Based on the areas where we are considering new and enhanced roles and functions for the FSO, which of these should be prioritised for development?

Please explain why

Amongst the areas where new and enhanced roles for the FSO are being considered, we see value in prioritising System Planning and Network Development. We believe FSO's role in 'whole' system planning will be central in driving the energy system towards net-zero. At the same time, we see the advisory function as a role that FSO can possibly pick up without much ado. Other specialised roles, for example with respect to decarbonisation of heat, hydrogen, CCUS, and other technologies, will be more complex and need further consultation so as to define and assess what role the FSO can usefully play, if any.

Question 20

What do you believe are the risks to implementation?

Please provide your answer below

The biggest risk to implementation will be disruption to the energy market. Hence, the implementation needs to be carried out in a reasonable time frame. Another risk will be pausing/delaying of any net-zero initiative that we ought to take because of a prolonged establishment of the FSO. At the same time, the decisions made during the time till FSO comes into being, may have to be revisited when the FSO is established and the FSO may take some time to understand them.

How can these be mitigated?

We hope that the proposed approach of using the existing capabilities of the NGESO and NGG will reduce the risk of disrupting the market to a large extent. Besides, the defined characteristics and attributes for the FSO would also contribute towards making sure that the FSO takes up the functions in the most responsible way. For implementation, we must take all steps to complete it in a reasonable time frame. Further, the FSO might be required to take a well-round approach to understand some of the decisions taken which they might need to take forward as cost of reversing some of them could be very high.

Question 21

Do you have any comments on potential implications of implementation for you, your organisation, or other stakeholders?

Please provide your answer below

We do not see a lot of significant implications for us from the implementation of the FSO. This is also because we are an independent entity ourselves.

However, we do believe that this process should not impact the decision making for net-zero in the interim. It is important that the decisions are not halted nor delayed while the FSO is being established which can impact the entire energy industry.

Chapter 6

Questions in this section relate to

Impact assessment

- FSO Impact assessment which is presented alongside this consultation to assess the likely costs, benefits and distributional impacts of the policy options considered

Question 22

What is your view on the position there are likely to be cost savings across the energy system from an increased “whole system” view, as described in paragraphs 50-55 of the IA?

A

Please provide your answer below

We do believe that creation of an organisation like FSO, who has an independent oversight of the entire energy system and a whole system view, would resolve efficiencies over time. We definitely see savings being made on account of better systems planning, efficient network investment and improved competition in networks. However, we are not sure how they weigh against the costs. We would rely on BEIS' analysis for that.

B

If so, is the potential magnitude of savings illustrated fairly in the IA?

We are happy to rely on BEIS's analysis and illustration of the savings.

C

If not, why not?

[Click here to enter text.](#)

Question 23

What is your view on the conclusion that policy intervention is likely to increase the benefits of onshore electricity network competition, as described in paragraphs 53-59 of the IA? If you agree, is the potential magnitude of savings illustrated fairly in the IA? If not, why not?

A

Please provide your answer below

On this, we are happy to rely on BEIS's analysis as is presented.

B

If not, why not?

[Click here to enter text.](#)

Question 24

Do you think that the impact assessment has identified and considered the key costs and benefits of policy intervention?

A

☒ **Yes**

☐ **No**

B

If not, can you provide details on other impacts that have not been considered?

[Click here to enter text.](#)

Question 25

Do you think that the distribution of impacts is fairly represented, with impacted groups correctly identified? Outlined in table 5 of the IA.

A

☒ Yes

☐ No

B

If not, why not?

[Click here to enter text.](#)

Question 26

We invite respondents' views on whether the proposals for energy system governance reform may have a different impact on people who have a protected characteristic (age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex (gender) or sexual orientation), in different ways from people who don't have that characteristic.

Please provide any evidence that may be useful to assist with our analysis of policy impacts.

The FSO will need to think beyond the mechanics of the system, and the outcomes it will create for groups in society should take account of questions such as their diversity. Hence, it might be useful to have this aspect inherent in the planning and analysis associated with the establishment of the FSO and the objectives set for it.

Thank you for your views on this consultation.

Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☒

At BEIS we carry out our research on many different topics and consultations, and your views are valuable to us. Would you be happy for us to contact you again from time to time either for research or about other consultations?

☒ Yes

☐ No